

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Purpose and Scope

a. This manual provides guidance for commanders and instructors presenting instruction and training on the functioning, installation, and employment of the antipersonnel mine, CLAYMORE.

b. This manual describes the M18A1 antipersonnel mine, CLAYMORE, its functioning, and installation. It provides a basis for conducting training utilizing the electric firing system issued with the mine. It also gives guidance for tactical employment and safety requirements. An earlier model of the CLAYMORE antipersonnel mine, the M18, is covered in appendix II.

c. The material contained herein is applicable without modification to both nuclear and nonnuclear warfare.

d. Users of this manual are encouraged to submit recommended changes or comments to

improve the publication. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be forwarded direct to the Commandant, United States Army Infantry School, Fort Benning, Ga. 31905.

2. Roles of the Antipersonnel Mine, CLAYMORE

The number of ways in which the CLAYMORE may be employed is limited only by the imagination of the user. The CLAYMORE is used primarily as a defensive weapon, but has its application in the offensive role. It must be emphasized that when the CLAYMORE is referred to as a weapon, this implies that it is employed in the controlled role. In the uncontrolled role, the CLAYMORE is considered a mine or boobytrap (FM 20-32).

Section II. DESCRIPTION

3. General

The M18A1 antipersonnel mine was standardized in 1960, and replaced the M18 antipersonnel mine (app. II). Both mines are similar in appearance and functioning. The M18A1 (fig. 1) is a directional, fixed-fragmentation mine. When employed in the controlled role, it is treated as a one-shot weapon. It is primarily designed for use against massed infantry attacks; however, its fragments are also effective against light vehicles. The M18A1 mine is equipped with a fixer plastic slit-type sight, adjustable legs, and two detonator wells.

The mine and all its accessories are carried in the M7 bandoleer (fig. 2). The instruction sheet for the M18A1 is shown in figure 3.

4. Casualty Effects

When detonated, the M18A1 mine will deliver spherical steel fragments over a 60° fan-shaped pattern that is 2 meters high and 50 meters wide at a range of 50 meters (fig. 4). These fragments are moderately effective up to a range of 100 meters and can travel up to 250 meters forward of the mine. The optimum effective range (the range at which the



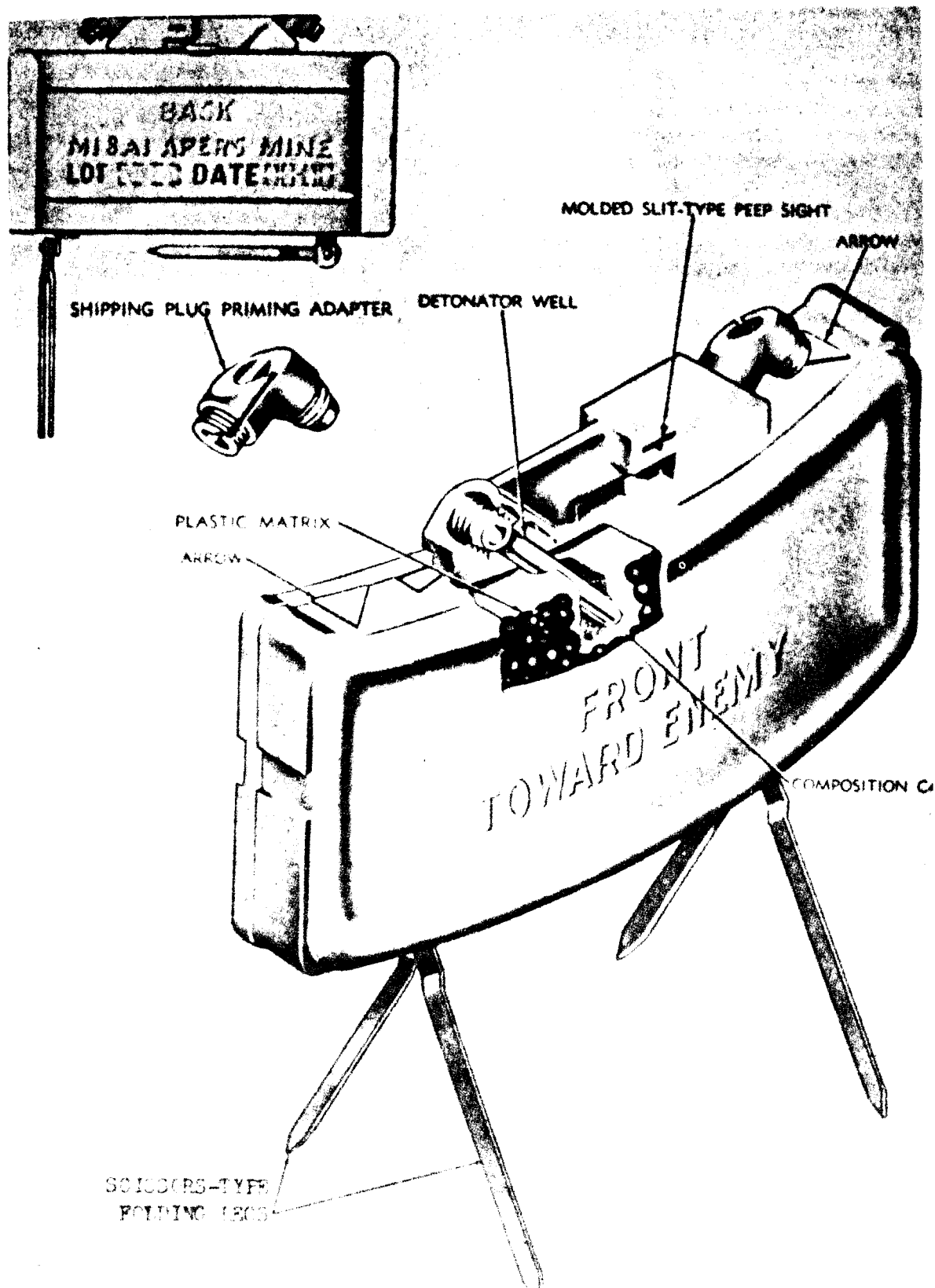


Figure 1. The M18A1 antipersonnel mine (CLAYMORE).

most desirable balance is achieved between lethality and area coverage) is 50 meters.

5. Danger Area

a. Danger From Fragments (fig. 4). The danger area consists of a 180° fan with a radius of 250 meters centered in the direction of aim.

b. Danger Area of Backblast and Secondary Missiles (figs. 4 and 24). Within an area of 16 meters to the rear and sides of the mine, backblast can cause injury by concussion (ruptured eardrums) and create a secondary missile hazard.

- (1) Friendly troops are prohibited to the rear and sides of the mine within a radius of 16 meters.
- (2) The minimum safe operating distance from the mine is 16 meters. At this distance, and regardless of how the mine is employed, the operator should be in a foxhole, behind cover, or lying prone in a depression. The operator and all friendly troops within 100 meters of the mine must take cover to prevent being injured by flying secondary objects such as sticks, stones, and pebbles.

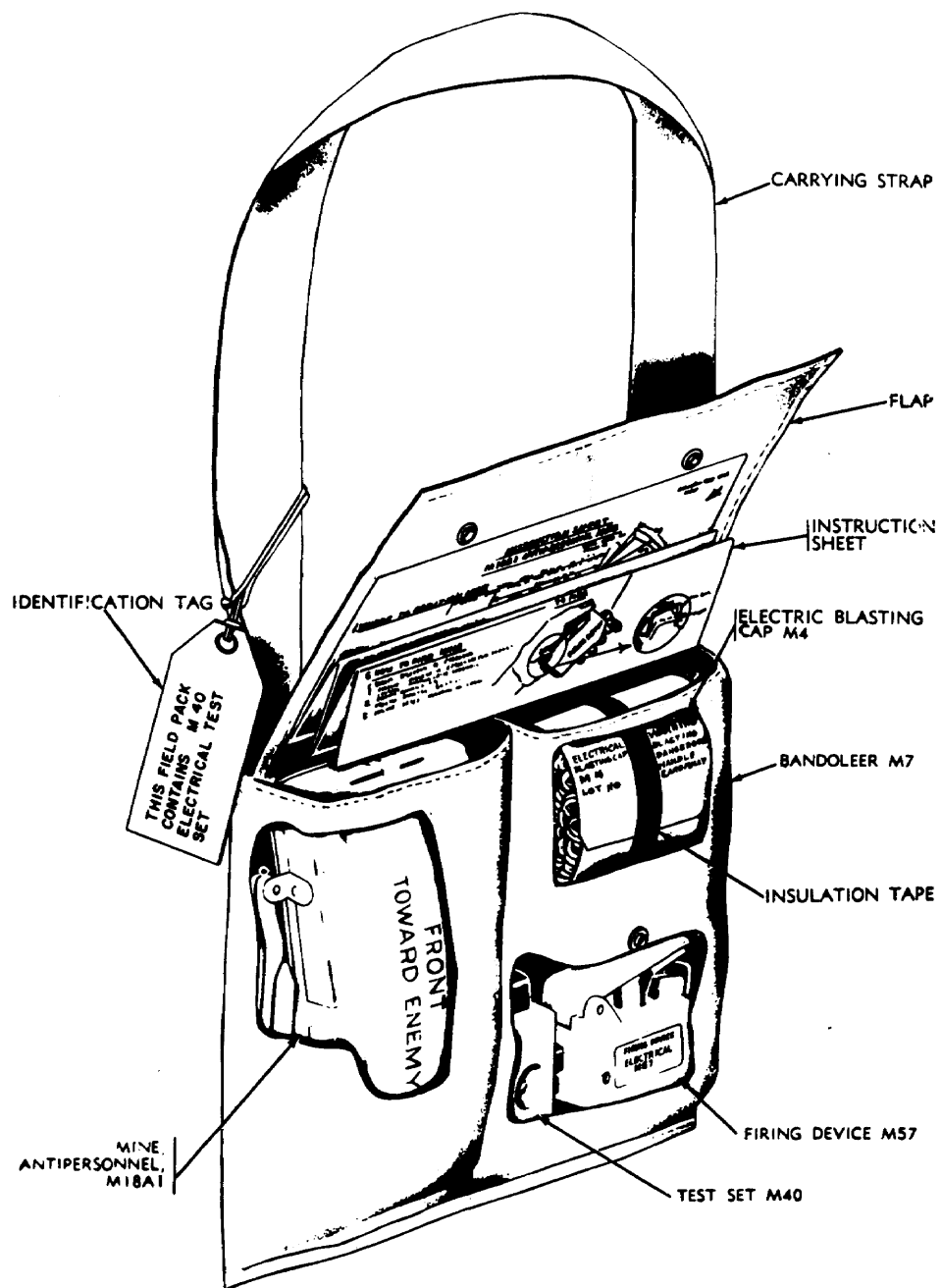


Figure 2. The M18A1 antipersonnel mine and accessories packed in the M7 bandoleer.

INSTRUCTION SHEET M18A1 ANTIPERSONNEL

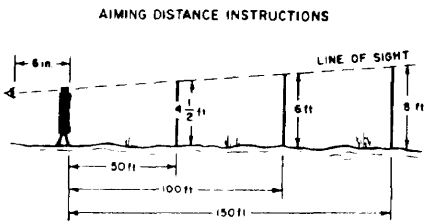
DIRECTION OF ENEMY

1. WHERE TO POSITION MINE



WARNING: TAKE COVER

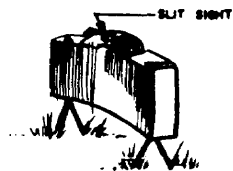
STONES OR MINE DEbris
300 FT. (132 PAGES) TO
TAKE COVER. THE MINE
SHOULD BE SIGHTED ON A POINT 8 FT. HIGH AT A DISTANCE OF 150 FT., OR ONE OF THE ALTERNATIVE POINTS SHOWN.



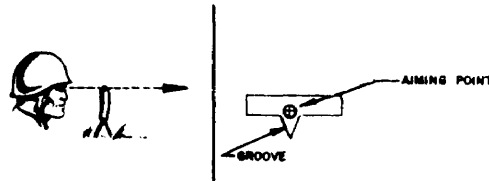
The mine should be sighted on a point 8 ft high at a distance of 150 ft, or one of the alternative points shown.

2. HOW TO AIM MINE :

1. TURN LEGS OF MINE DOWNWARD AND SPREAD APART. TWIST THE SPREAD LEGS TO LIE TO THE FRONT AND BACK AS SHOWN. ARROWS POINT TO ENEMY.

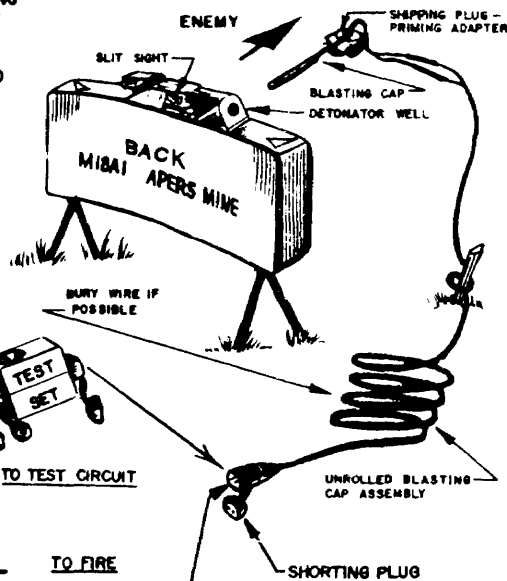


2. AIM MINE BY SIGHTING THROUGH SLIT SIGHT. SHIFT MINE TO PUT GROOVE IN LINE WITH AIMING POINT. PRESS LEGS FIRMLY INTO GROUND RECHECKING AIM.



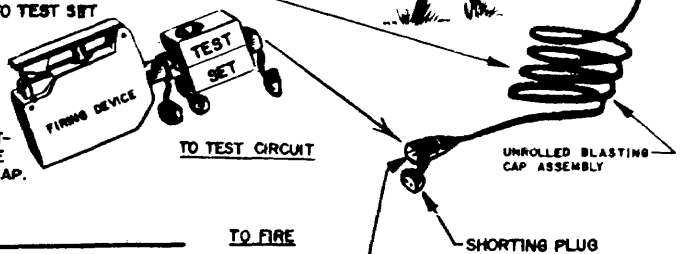
3. HOW TO ARM MINE :

1. UNROLL PAPER FROM BLASTING CAP ASSEMBLY BY PULLING INSULATING TAPE TAB (SAVE TAPE FOR POSSIBLE REPAIR OF WIRE.)
2. LAY WIRE BETWEEN MINE AND FIRING POSITION (CAN UNROLL WIRE FROM MINE OR FIRING POSITION) WRAP WIRE AROUND LEG OF MINE AS SHOWN AND BURY WIRE IF POSSIBLE.
3. INSERT BLASTING CAP IN EITHER DETONATOR WELL AND LOCK WITH SHIPPING PLUG-PRIMING ADAPTER.
4. RECHECK AIM OF MINE AFTER ABOVE ARMING.



4. HOW TO TEST CIRCUIT :

- (TAKE COVER AT FIRING POSITION)
1. REMOVE SHORTING PLUG FROM BLASTING CAP WIRE.
2. INSERT PLUG OF BLASTING CAP WIRE INTO TEST SET
3. INSERT PLUG OF TEST SET INTO FIRING DEVICE.
4. SWING SAFETY BAIL TO FIRE POSITION AND FROM COVERED POSITION DEPRESS FIRING HANDLE. LIGHT IN WINDOW OF TEST SET INDICATES GOOD CIRCUIT. IF NO LIGHT, WIRE OR CAP MAY BE DEFECTIVE. CHECK AND REPAIR WIRE WITH TAPE SAVED FROM WRAPPER OR REPLACE CAP.



5. HOW TO FIRE MINE :

- (TAKE COVER AT FIRING POSITION)
1. INSERT PLUG OF BLASTING CAP WIRE DIRECTLY INTO FIRING DEVICE (SAFETY ON)
2. WHEN READY TO FIRE, SWING SAFETY BAIL TO ARMED POSITION.
3. FIRE BY DEPRESSING HANDLE SMARTLY.

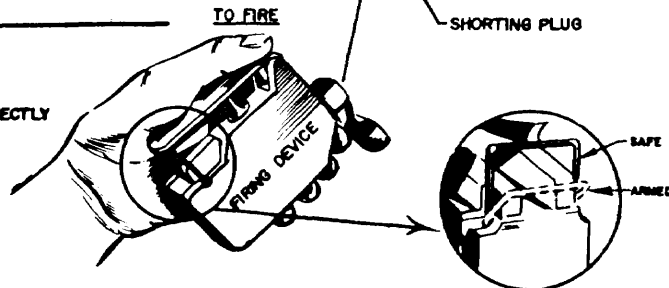


Figure 3. The instruction sheet attached to the M7 bandoleer.

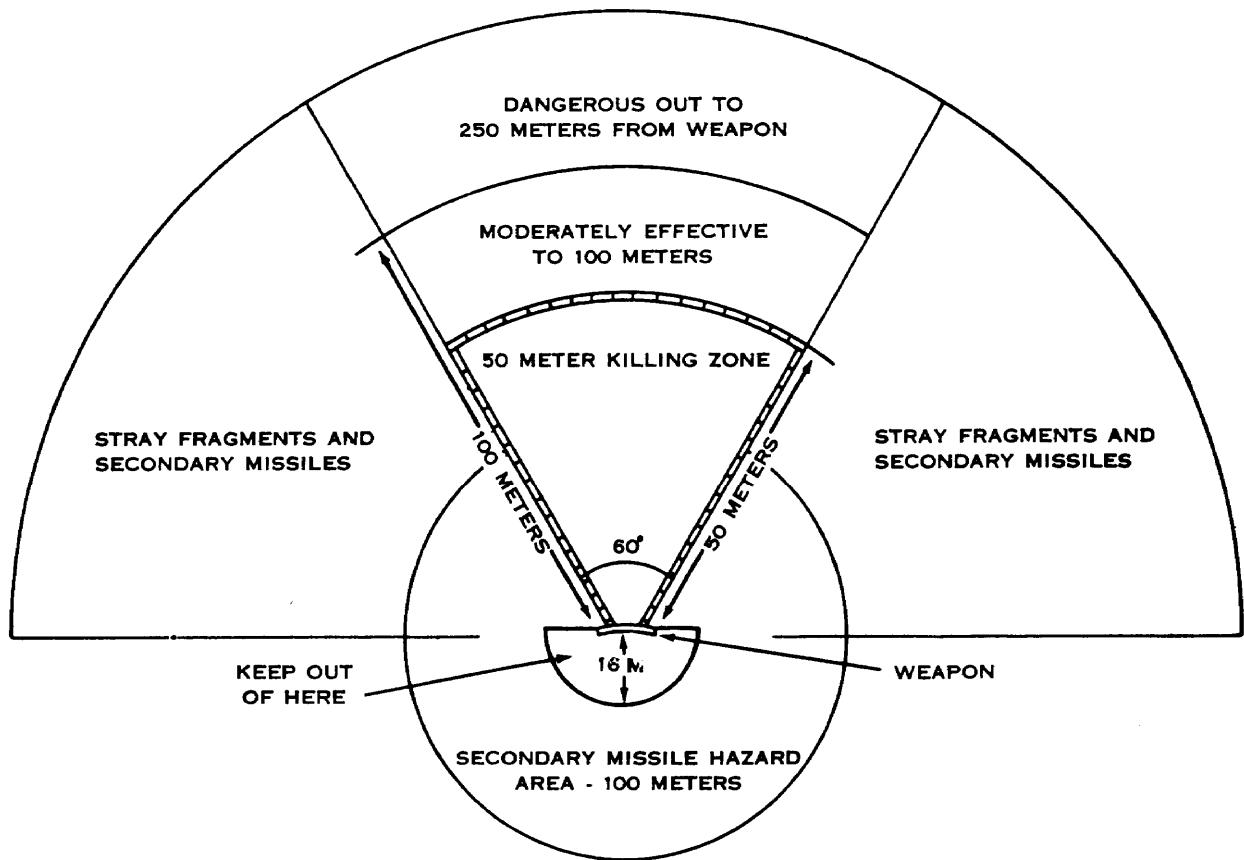


Figure 4. Danger radius and effects of the M18A1.